

Notice of Allowability

Application No.

10/689,627

Examiner

Glenn K. Dawson

Applicant(s)

ADAMS, KENNETH M.

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to AF amendment of 09-17-2007.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <p>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____</p> <p>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material</p> | <p>5. <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>10-10-2007</u>.</p> <p>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</p> <p>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</p> <p>9. <input type="checkbox"/> Other _____</p> |
|--|--|


GLENN K. DAWSON
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Karen Gerken on 10-10-2007.

The application has been amended as follows:

In claim 10 (currently amended) line 14, --inner—has been inserted after "the".

In claim 13 line 2, --inner—has been inserted after "through said".

The above amendments were made to correct indefiniteness.

The following is an examiner's statement of reasons for allowance: The prior art does not disclose or suggest a flexible inner cutter inside an outer bent tube; the cutter having a tube with a flexible portion received in the bent portion of the outer tube; the flexible portion including a continuous helical cut, a coating of adhesive over the surface of the flexible portion and a heat shrunk sleeve over the adhesive, the flexible portion conforming to the bent shape of the outer tube and transmitting torque to rotate the

cutter; the sleeve providing resistance to wind-up and unwinding of the flexible portion when transmitting torque. Also not disclosed or suggested is a flexible inner cutter inside an outer bent tube; the cutter having a tube with a flexible portion received in the bent portion of the outer tube; the flexible region of the inner cutter tube including an outer wall along an outer diameter surface and an inner wall along an inner diameter surface, the walls secured together, the inner wall having a helical cut portion with a cut through the inner wall and extends helically along the length, and the outer wall having a continuous solid flexible surface covering the helically cut portion, the flexible portion conforming to the bent shape of the outer tube and transmitting torque to rotate the cutter; the outer wall providing resistance to wind-up and unwinding of the flexible portion when transmitting torque.

The examiner agrees with the applicant that no inner cutter inside a bent outer tube has been shown to have a continuous helical cut covered by a heat shrunk sleeve where the sleeve provides resistance to wind-up and unwinding of the flexible portion when transmitting torque. The base reference relied upon in the last action requires tabs for forming the required springs in the tube. Additionally, it already had material in the slots which do not extend past the outer diameter of the cutter tube and therefore it would not have been obvious to have provided an outer sleeve covering the slots. It also would not have been obvious to have placed the cutter of Kraus -922 inside an outer bent tube because it was designed to be able to flex around objects during cutting and this would not be possible if an outer bent tube were placed around the flexible inner cutting tube. Additionally, new reference Peters-2002/0038129 has the claimed

inner cutting tube with the claimed helical cut slot inside of an outer bent tube. However, the inner helically cut tube portion is covered by a helical wrapping(s) which fails to meet the continuous solid flexible surface covering the helical cut portion of claim 10, and it would not have been obvious to have replaced this wrapping of stainless steel with that of an adhesively attached heat shrunk sleeve.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn K. Dawson whose telephone number is 571-272-4694. The examiner can normally be reached on M-Th 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Glenn K Dawson
Primary Examiner
Art Unit 3731

Gkd
10 October 2007

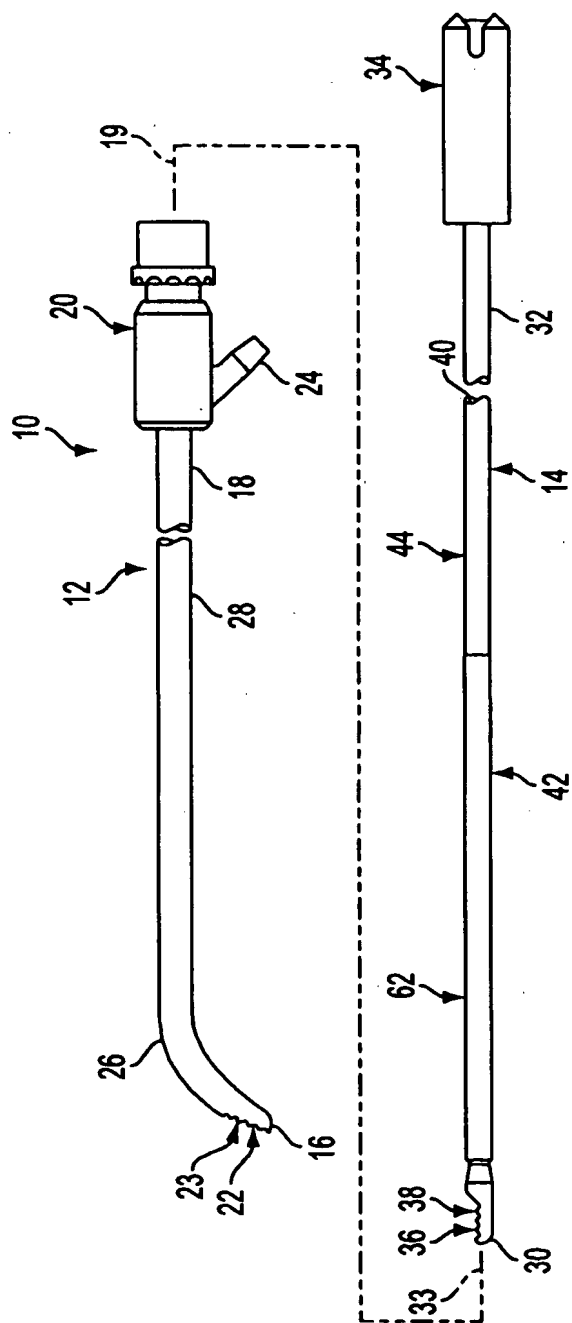


FIG. 1

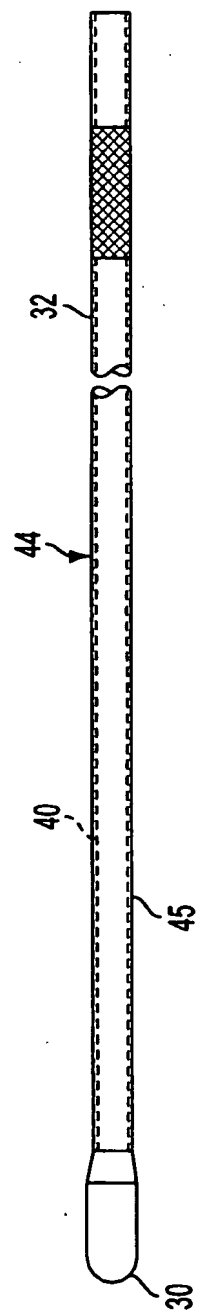


FIG. 2

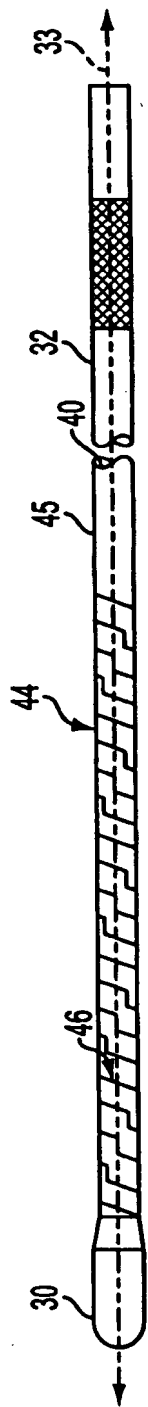


FIG. 3

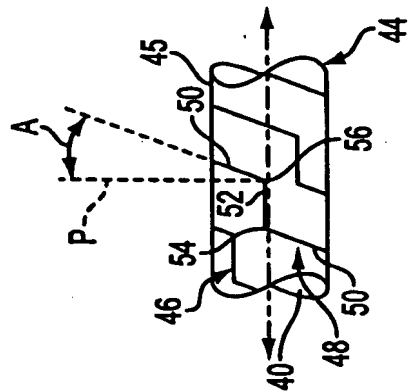


FIG. 4

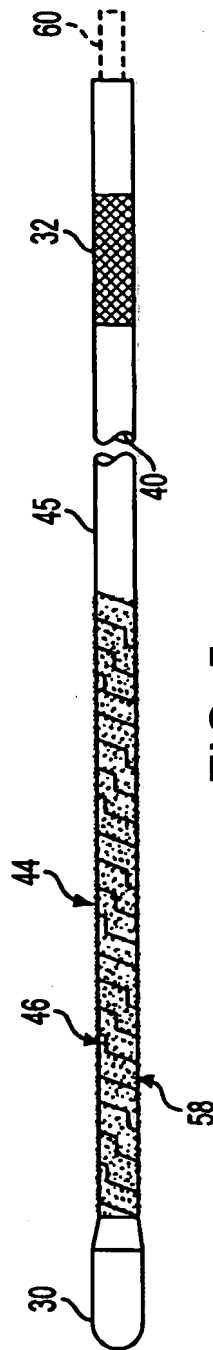


FIG. 5

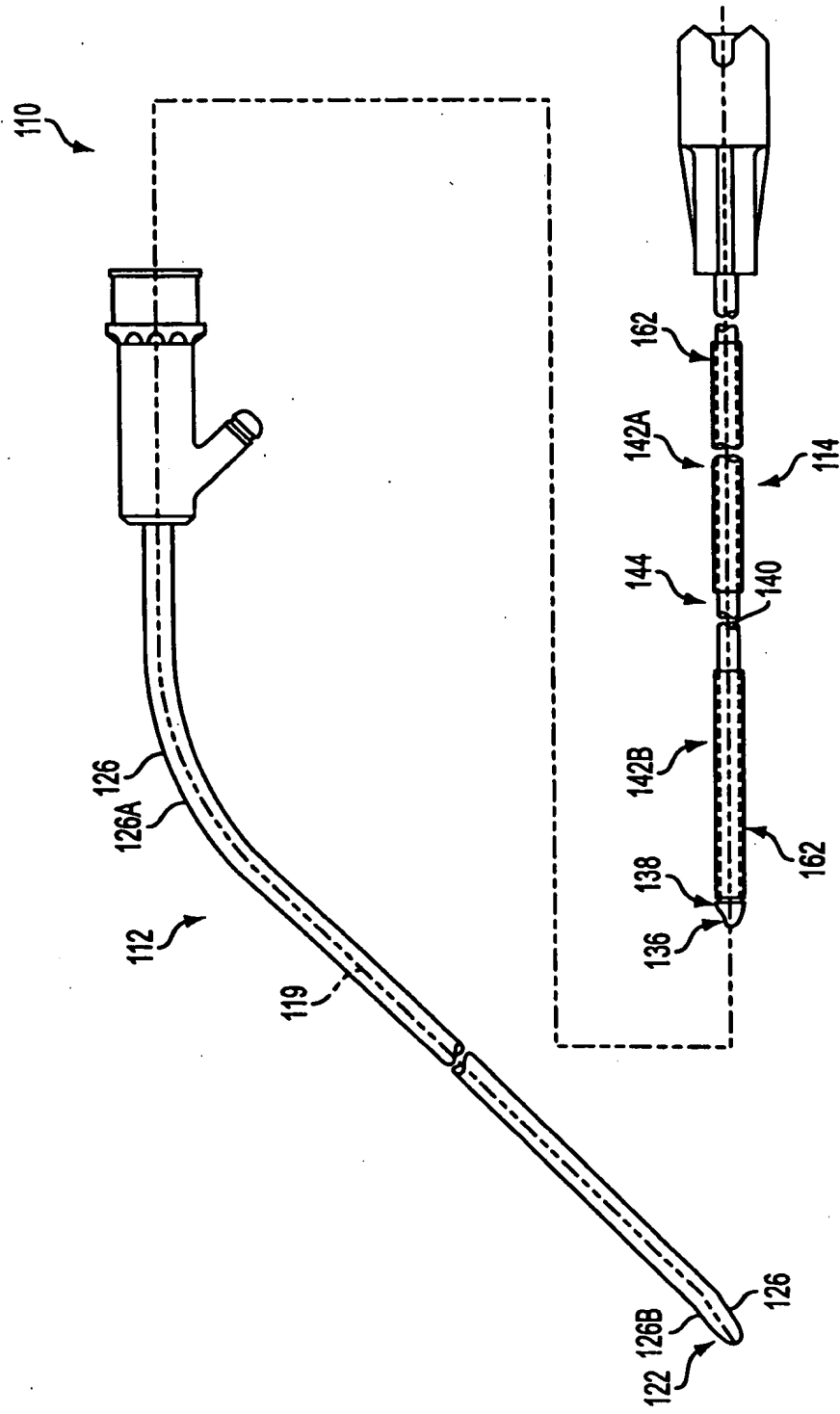


FIG. 8